

I claim:

1. A process for applying solutions on a semiconductor wafer which comprises:
 - (a) rotating a substrate about a central point thereof;
 - (b) dispensing a solution mist from a spray nozzle onto a top surface of said rotating substrate;
 - (c) said dispensing nozzle moving radially between the central axis and an edge of the substrate while dispensing said solution.
2. The process of Claim 1 wherein the rotational speed of the semiconductor wafer is less than 2500 rpm.
3. The process of Claim 2 wherein the spray nozzle is selected from the list consisting of atomizer nozzle and airless spray-mist nozzle.
4. A method for forming a coating upon a planar substrate having an upper surface which comprises (a) rotating the substrate at a speed sufficient through centrifugal effect to cause a solution to flow outwardly toward the perimeter of the surface and form a substantially uniform thickness liquid coating thereon, (b) starting at the central region of the planar surface and moving radially outward therefrom, and (c) spraying a mist of the liquid to the surface.
5. The process of Claim 4 wherein the rotational speed of the semiconductor wafer is less than 2500 rpm.
6. A process for applying solutions on a substrate which comprises:
 - (a) rotating a substrate about a central point thereof;
 - (b) dispensing a polymer dielectric mist from a spray nozzle onto a top surface of said rotating substrate;
 - (c) said dispensing nozzle moving radially between the central axis and an edge of the substrate while dispensing said solution.

7. An coating apparatus for coating a wafer of known diameter with a substantially uniform coating of a solution, the apparatus comprising:

- (a) a containment bowl;
- (b) a rotatable spin chuck mounted inside the containment bowl;
- (c) a wafer attachment surface on the chuck;
- (d) a dispersing mist spray nozzle moveably positioned above the wafer attachment surface.